TX-NR747 7.2-Channel Network A/V Receiver

BLACK SILVER

Breathtaking Surround Sound is Only the Beginning

Bring home THX® Select2™ Plus theater-reference-quality audio with the 7.2-channel TX-NR747 Network A/V Receiver, featuring mind-blowing DTS:X™ and Dolby Atmos® multi-dimensional audio formats. Onkyo's high-current amplification system drives speakers to reproduce soundtracks with maximum impact and fidelity at 175 W/Ch. UltraHD video capability is equally impressive, with eight HDMI® terminals including dedicated HDCP 2.2 compatible inputs for premium 4K video content and two HDMI outputs for video in separate rooms. The TX-NR747's high-grade 384 kHz/32-bit AKM DAC not only brings movies to life, but music as well. Conveniently stream audio over built-in Wi-Fi®, Bluetooth, AirPlay, or internet music services including Spotify Connect and Deezer. Use the free Onkyo Remote app to stream audio stored on mobile devices or 24-bit Hi-Res PCM or 5.6 MHz DSD audio from your home network over DLNA, and control playback in two zones. Plus, the TX-NR747 has a phono equalizer input to connect a turntable and updated AccuEQ for precise room acoustic calibration.

HIGHLIGHTS

- THX®-Certified Amp Quality
- DTS:X™ and Dolby Atmos® Support
- 175 W per Channel
- Hi-Current Amp Design for Authentic Sound Reproduction
- HDMI® 8 In / 2 Out Including 1 Front (4K UltraHD / HDCP 2.2)
- Bluetooth Audio / Wi-Fi® with Spotify and AirPlay
- DSD 5.6 MHz, FLAC 192 kHz/24-bit Hi-Res Audio Capable
- 384 kHz/32-bit Hi-Grade DAC
- AccuEQ Room Acoustic Calibration

ADVANCED FEATURES

- New DTS:X™ New Generation Sound Format Ready
- Supports New Dolby Atmos® Format for Exciting Multidimensional Sound
- THX® Select2™ Plus Certified for Theater Reference Sound
- 4K/60 Hz-Capable 4:4:4 HDMI® Terminals for UltraHD Entertainment*1
- Supports HDCP 2.2 for Future 4K/Full HD Video Streaming and Broadcast*2
- Built-in Wi-Fi® Certified Wireless LAN Capability
- Bluetooth Version 2.1 + EDR Capability (Compatible Profile: A2DP v1.2, AVRCP v1.3) with Advanced Music Optimizer DSP Technology
- Internet Radio and Music Streaming Subscription Services Included (TuneIn Radio, Spotify, and Deezer)*3
- Playback Compressed, Lossless, and Hi-Res Audio via Local Network (MP3, WMA, WMA Lossless, FLAC, WAV, Ogg Vorbis, AAC, Apple Lossless, DSD 5.6 MHz, LPCM*4, and Dolby® TrueHD)
- Proprietary AccuEQ Room Calibration with Mic Included
- Advanced Music Optimizer to Improve Compressed Digital Audio Quality (Bluetooth Audio Included)
- Control and Stream with Free Onkyo Remote Streaming Apps for iPod touch/iPhone*5 and Android™ Devices*6
- PM Bass Boost for Deep Bass and Clear Mid-Range
- Powered Zone 2 and Zone 2 Line-Outs for Distributed Audio Playback
- Bi-Amping Capability for Front Channels

**1 6G video is supported on HDMI inputs 1/2/3, Main Out, and Sub Out. *2 HDCP 2.2 is supported on HDMI inputs 1/2/3, Main Out, and Sub Out. *3 Availability of services depends on region. Some services may require a paid subscription and firmware update. Availability of third-party services advertised here is accurate at the time of publication, but may be subject to change without notice. *4 LPCM is supported via DLNA only. *5 Compatible with iPod touch (3rd generation or later) and iPhone 3GS or later. All models require iOS 4.2 or later. *6 Requires Android 2.1 or later.*

AMPLIFIER FEATURES

- 175 W/Ch (6 Ω, 1 kHz, 1% THD, 1 Channel Driven, IEC); 185 W/Ch (6 Ω, 1 kHz, 1 Channel Driven, JEITA)
- WRAT (Wide Range Amplifier Technology)
- H.C.P.S. (High Current Power Supply) Massive High Power Transformer
- Discrete Output Stage Circuitry
- Optimum Gain Volume Circuitry
- PLL (Phase Locked Loop) Jitter-Cleaning Circuit Technology for S/PDIF Audio

PROCESSING FEATURES

- HDMI for 4K/60 Hz Video, 3D, Audio Return Channel, DeepColor™, x.v.Color™, LipSync, Dolby Atmos®, Dolby® TrueHD, DTS:X™, DTS-HD Master Audio™, DVD-Audio, Super Audio CD, Multichannel PCM, and CEC
- AK4458 384 kHz/32-bit DAC (8 Channels x 1)
- Dual 32-bit Digital Signal Processing Engines
- 4 DSP Modes for Gaming: Rock, Sports, Action, and RPG
- Theater-Dimensional Virtual Surround Function
- Direct Mode
- Double Bass Function
- Non-Scaling Configuration
- A-Form Listening Mode Memory

CONNECTION FEATURES

- 8 HDMI Inputs (1 Front/7 Rear) and 2 Outputs
- USB Port
- Mass Storage Class USB Memory Playback Capability
- 2 Component Video
- 3 Composite Video Inputs
- 3 Digital Audio Inputs (2 Optical and 1 Coaxial)
- 8 Analog Audio Inputs
- Phono Input for Turntable Connection
- 2 Parallel Subwoofer Pre-Outs
- Location Numbered Speaker Terminal

OTHER FEATURES

- Independent Crossover Adjustment for Each Channel (40/50/60/70/80/90/100/120/150/200 Hz)
- A/V Sync Control (Up to 500 ms in 10 ms Steps at 48 kHz)
- Graphical Overlaid On-Screen Display (OSD) via HDMI with Quick Set-Up
- Hybrid Standby Function with HDMI Passthrough
- Smart Grid-Ready
- Tone Control (Bass/Treble)
- 3-Mode Display Dimmer (Normal/Dim/Dimmer)
- 40 FM/AM Random Presets
- Certified with DLNA Version 1.5
- Firmware Updates via Ethernet and USB
- RIHD (Remote Interactive Over HDMI) for System Control
- Preprogrammed RI (Remote Interactive) Remote Control

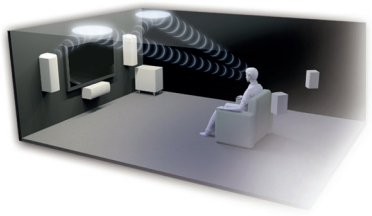
TX-NR747 7.2-Channel Network A/V Receiver

THX®-Certified Amp Quality

THX certification guarantees the same high volume, low distortion sound you experience in a commercial cinema in your listening room. THX® Select2™ Plus is recommended for screen-to-seat viewing distances of 10-12 feet (3-4 m).

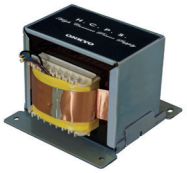
DTS:X™ and Dolby Atmos® Support

DTS:X is a next-generation object-based surround sound technology that includes height to deliver a fully-immersive listening experience to your living room. DTS:X provides listeners the ultimate in flexibility, immersion, and interactivity. Dolby Atmos transports you from an ordinary moment into an extraordinary experience with captivating, multidimensional sound that fills your room and flows all around you to move your mind, body, and soul.



Hi-Current Amp Design for Authentic Sound Reproduction

High instantaneous current enhances speaker control for accurate and dynamic audio reproduction. It's the cornerstone of Onkyo's amplification philosophy.



HDMI® 8 In / 2 Out Including 1 Front (4K UltraHD / HDCP 2.2)

All HDMI terminals support 4K/60 Hz, as well as HDCP 2.2 for next-generation UltraHD streaming and broadcasting.

Bluetooth / Wi-Fi® with Spotify and AirPlay

Stream virtually any audio from your smartphone, tablet, or PC to your home cinema for clear and powerful sound. Available internet radio and music subscription services include Spotify and many more.

DSD 5.6 MHz, FLAC 192 kHz/24-bit Hi-Res Audio Capable

Onkyo A/V receivers are engineered for universal Hi-Res compatibility and ease of use. Use the remote app to locate your 192/24 and 96/24 albums (including 5.6 MHz DSD playback) on PC or NAS and bask in the clarity, depth, and detail of high-resolution music.

384 kHz/32-bit Hi-Grade DAC

A premium-quality AK4458 digital-to-analog converter from Asahi Kasei unlocks the full potential of any audio format, thanks to unique low-distortion filtering technologies for clear sound.

SPECIFICATIONS

Amplifier Section

Power Output	
All Channels	175 W/Ch (6 Ω, 1 kHz, 1% THD, 1 Channel Driven, IEC) 185 W/Ch (6 Ω, 1 kHz, 1 Channel Driven, JEITA)
Dynamic Power	250 W (3 Ω, Front) 230 W (4 Ω, Front) 130 W (8 Ω, Front)
THD+N (Total Harmonic Distortion + Noise)	0.08% (20 Hz–20 kHz, Half Power)
Damping Factor	60 (Front, 1 kHz, 8 Ω)
Input Sensitivity and Impedance	200 mV/47 kΩ (Line) 2.5 mV/47 kΩ (Phono MM)
Rated RCA Output Level and Impedance	1.00 V/2.2 kΩ (Zone 2 Line Out) 2.00 V/470 Ω (Subwoofer Pre Out)
Maximum RCA Output Level and Impedance	1.0 V/2.2 kΩ (Zone 2 Line Out) 2.0 V/470 Ω (Subwoofer Pre Out)
Phono Overload	70 mV (MM, 1 kHz, 0.5%)
Frequency Response	10 Hz–100 kHz/+1 dB, -3 dB (Direct Mode)
Tone Control	±10 dB, 20 Hz (Bass) ±10 dB, 20 kHz (Treble)
Signal-to-Noise Ratio	100 dB (Line, IHF-A) 80 dB (Phono MM, IHF-A)
Speaker Impedance	4 or 6 Ω–16 Ω

Video Section

Input Sensitivity/Output Level and Impedance	
Video	1.0 Vp-p/75 Ω (Component Y) 0.7 Vp-p/75 Ω (Component PB/CB, PR/CR) 1.0 Vp-p/75 Ω (Composite)
Component Video Frequency Response	5 Hz–13.5 MHz/+0 dB, -3 dB

Tuner Section

Tuning Frequency Range	
FM	87.5 MHz–108 MHz 87.5 MHz–107.9 MHz (Taiwan Model)
AM	522 kHz–1,611 kHz 530 kHz–1,710 kHz 530 kHz–1,710 kHz (Taiwan Model)
FM/AM Preset Memory	40 Stations

General

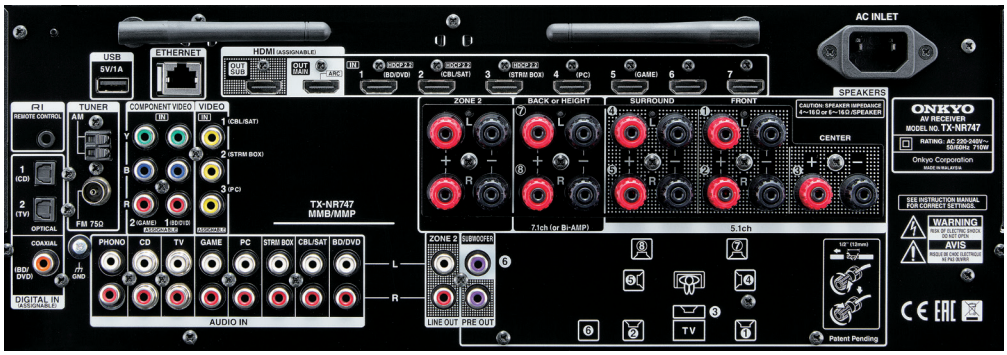
Power Supply	AC 220–240V~, 50/60 Hz AC 120V~, 60 Hz (Taiwan Model)
Power Consumption	710 W
No-Sound Power Consumption	70 W
Standby Power Consumption	0.15 W
Dimensions (W x H x D)	435 x 175 x 379 mm
Weight	11.5 kg

CARTON

Dimensions (W x H x D)	570 x 298 x 469 mm
Weight	15 kg

Supplied Accessories

- Indoor FM antenna • AM loop antenna
- Speaker set-up microphone • Instruction manual
- Remote controller • AA (R6) batteries x 2



Text on receiver may vary with region.

Due to a policy of continuous product improvement, Onkyo reserves the right to change specifications and appearance without notice. THX, the THX logo, and Select2 are trademarks of THX Ltd. THX and the THX logo are registered in the U.S. and other jurisdictions. All rights reserved. Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories. For DTS patents, see http://patents.dts.com. Manufactured under license from DTS Licensing Limited. DTS, DTS-HD, the Symbol, & DTS and the Symbol together are registered trademarks, and DTS:X and DTS-HD Master Audio are trademarks of DTS, Inc. © DTS, Inc. All Rights Reserved. HDMI, the HDMI logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries. The Bluetooth® word mark and logos are owned by the Bluetooth SIG, Inc. AirPlay, iPad, iPhone, and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries. iPad Air and iPad mini are trademarks of Apple Inc. "Made for iPod", "Made for iPhone" and "Made for iPad" mean that an electronic accessory has been designed to connect specifically to iPod, iPhone, or iPad, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPod, iPhone or iPad may affect wireless performance. AirPlay works with iPhone, iPad, and iPod touch with iOS 4.3.3 or later, Mac with OS X Mountain Lion or later, and PC with iTunes 10.2.2 or later. WRAT, Music Optimizer, CinemaFILTER, and Theater-Dimensional are trademarks of Onkyo Corporation. All other trademarks and registered trademarks are the property of their respective holders.

ONKYO http://www.onkyo.com/

Copyright © 2015 Onkyo Corporation. All rights reserved.

NPR No. 15N16 04/15